

Table of Contents:

Preface	viii
Oxygen Isotopes in Foraminifera: Overview and Historical Review <i>Paul N. Pearson</i>	1
Applying Oxygen Isotope Paleothermometry in Deep Time <i>Ethan L. Grossman</i>	39
Conodonts and the Paleoclimatological and Paleoecological Applications of Phosphate $\delta^{18}\text{O}$ Measurements <i>Kenneth G. MacLeod</i>	69
The Use of Mg/Ca as a Seawater Temperature Proxy <i>Tim K. Lowenstein and Bärbel Hönisch</i>	85
Clumped Isotope Paleothermometry: Principles, Applications, and Challenges <i>Hagit P. Affek</i>	101
GDGT Thermometry: Lipid Tools for Reconstructing Paleotemperatures <i>Jessica E. Tierney</i>	115
Reconstructing Paleoseasonality from Accretionary Skeletal Carbonates—Challenges and Opportunities <i>Linda C. Ivany</i>	133
Reconstructing Terrestrial Environments Using Stable Isotopes in Fossil Teeth and Paleosol Carbonates <i>Benjamin H. Passey</i>	167
Climate Reconstruction from Leaf Size and Shape: New Developments and Challenges <i>Dana L. Royer</i>	195
Progress in Greenhouse Climate Modeling <i>Matthew Huber</i>	213